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DEPARTMENT OF THE ARMY
ARMY SCIENTIFIC ADVISORY PANEL
WASHINGTON, D.C. 20310

DAMA-ARA

6 August 1975

Don't understand Range and errors problems. How about firing at your - all the low margin subscribers have trouble. This is just a very complete report. Looks pure like desired conclusion. W.

MEMORANDUM FOR: DR. HANEMAN
MR. HAWKINS
MR. SAMUELS
MR. WEISS

SUBJECT: Caliber/Gun for AAH

1. At Incl 1 are the Terms of Reference (TOR) for subject effort; at Incl 2 is the membership listing of those participating. At Incl 3 ~~(CONFIDENTIAL)~~ is the "report" cited in the TOR.

2. I must point out that the TOR are slightly amended from those I read to you telephonically, specifically paras 2d and 3. I must also state that the "report" is in the form of a package of vugraphs used for the presentation.

3. You are scheduled to receive detailed briefings on 19 and 20 August from concerned Government agencies, contractors, and Staff personnel. LTC Cass will contact you during the week of 11 August to advise time and place of your meeting.

4. I thank you again in behalf of all concerned for your most willing response to tackling this problem.

A. N. BONE
Lieutenant Colonel, GS
Executive Secretary

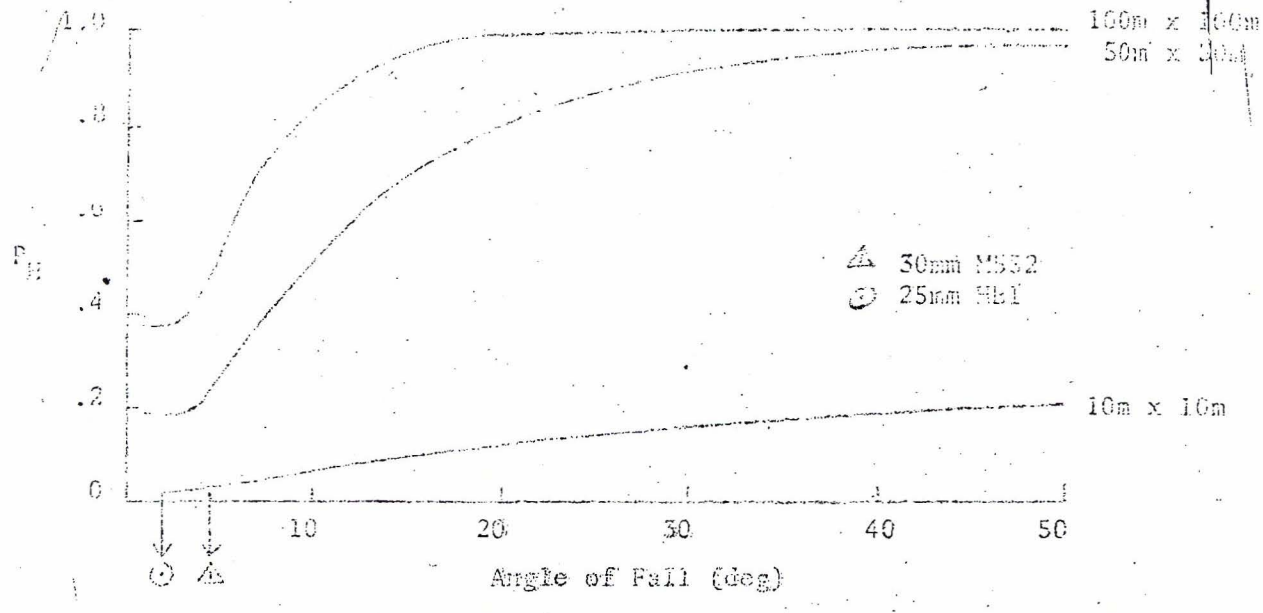
3 Incl
as

CF: LTC Cass

~~CONFIDENTIAL~~

~~Regraded UNCLASSIFIED~~ when separated from CLASSIFIED inclosures

Range Error = 15 (σ)



Range = 1000m
Error = 6m (σ)
Altitude = 30m

Range Error = 5% (σ)

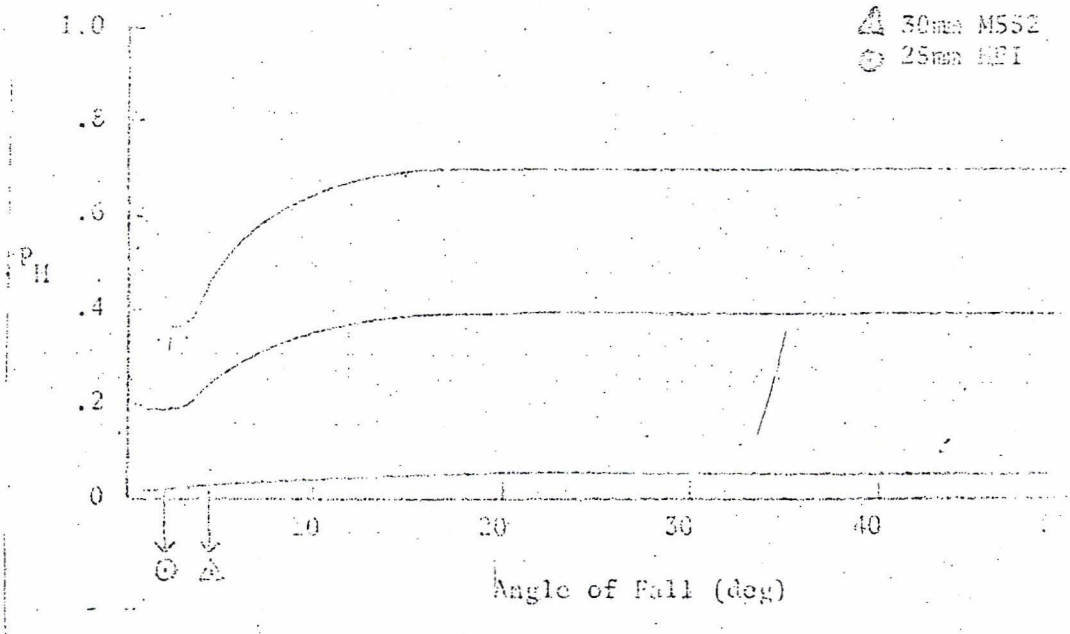


Figure 1 (C) Single Round Probability of Hit (P_H) Vs. Angle

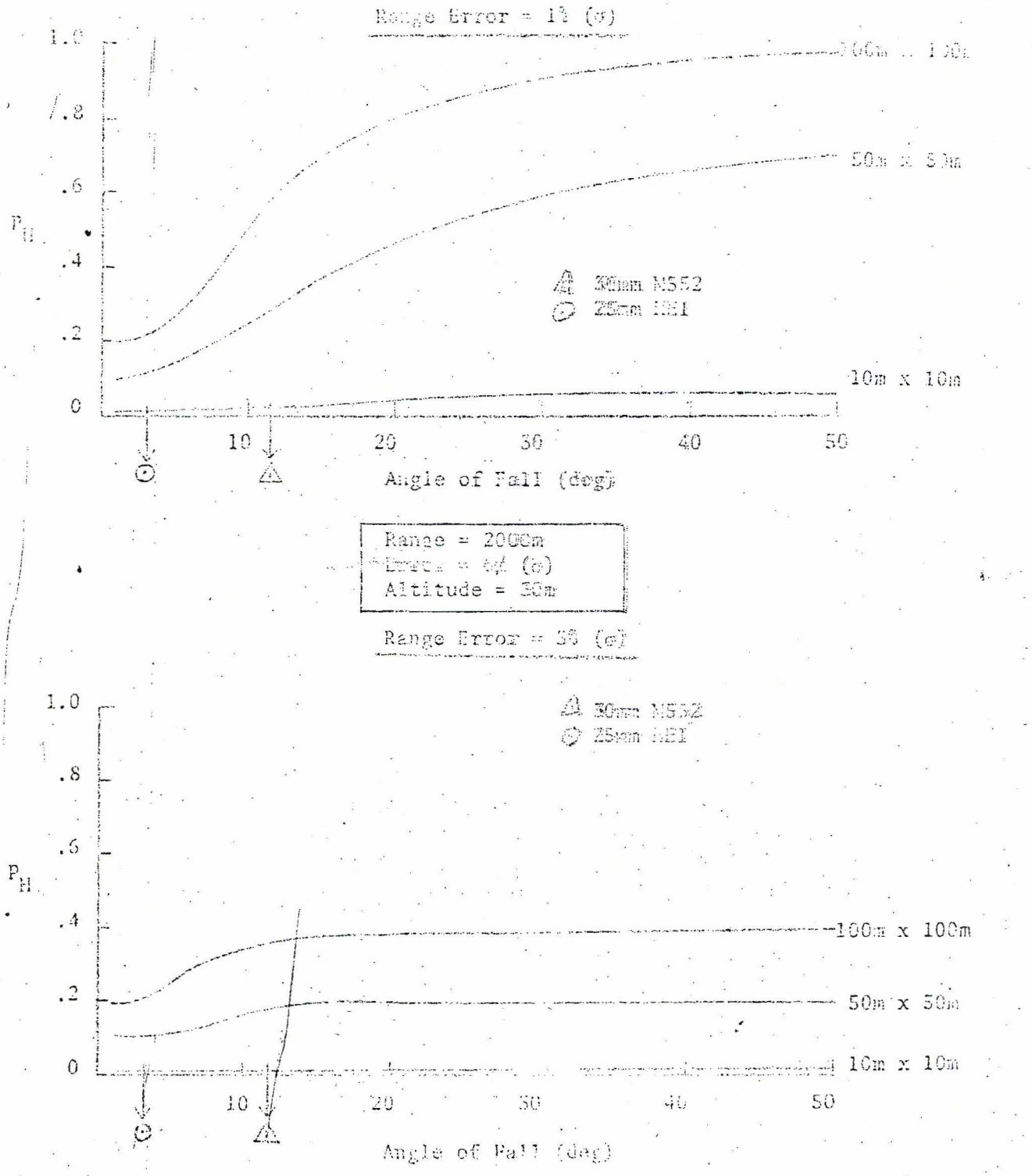


Figure 2 (U) Single Round Probability of Hit (P_H) Vs. Angle of Fall (θ)

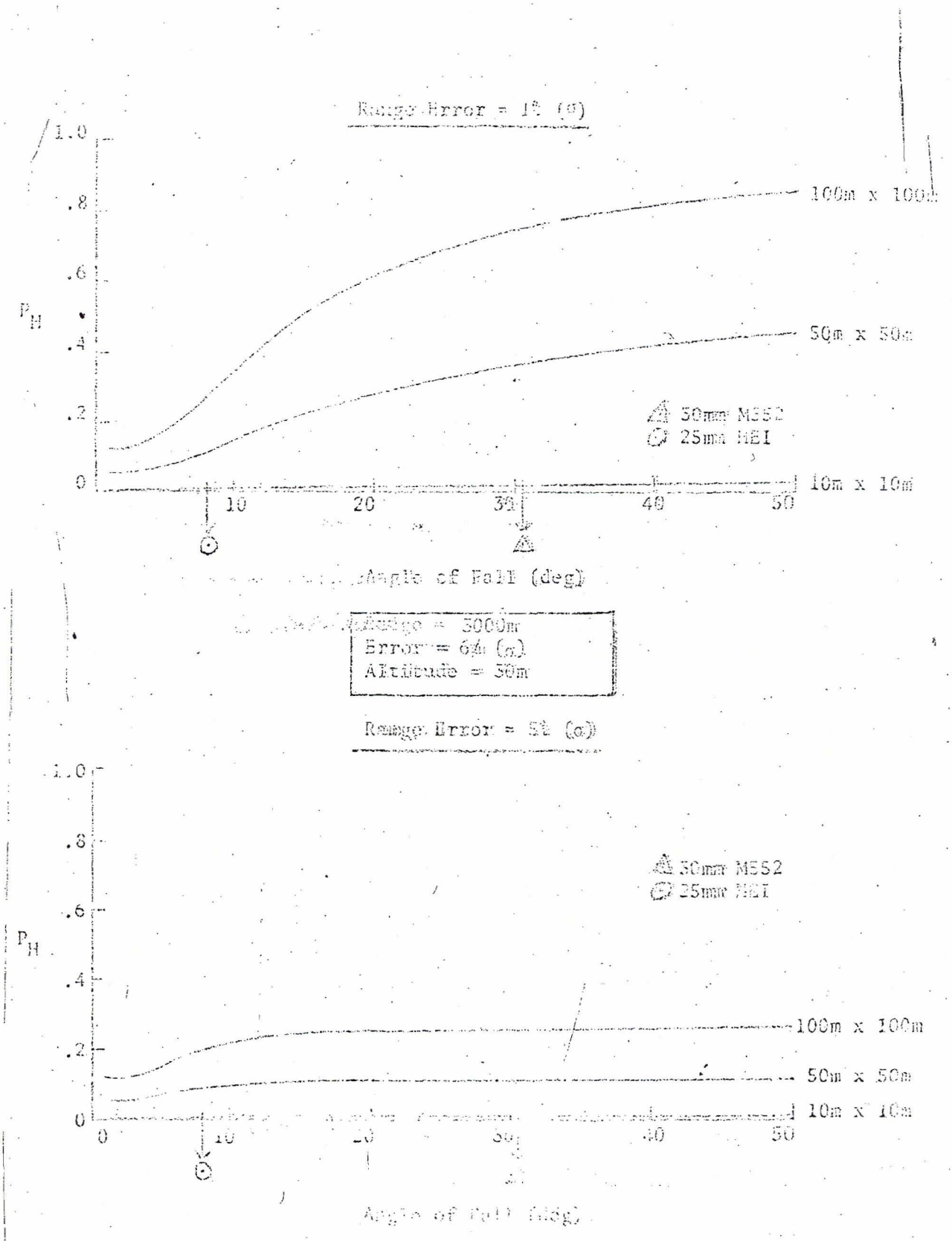
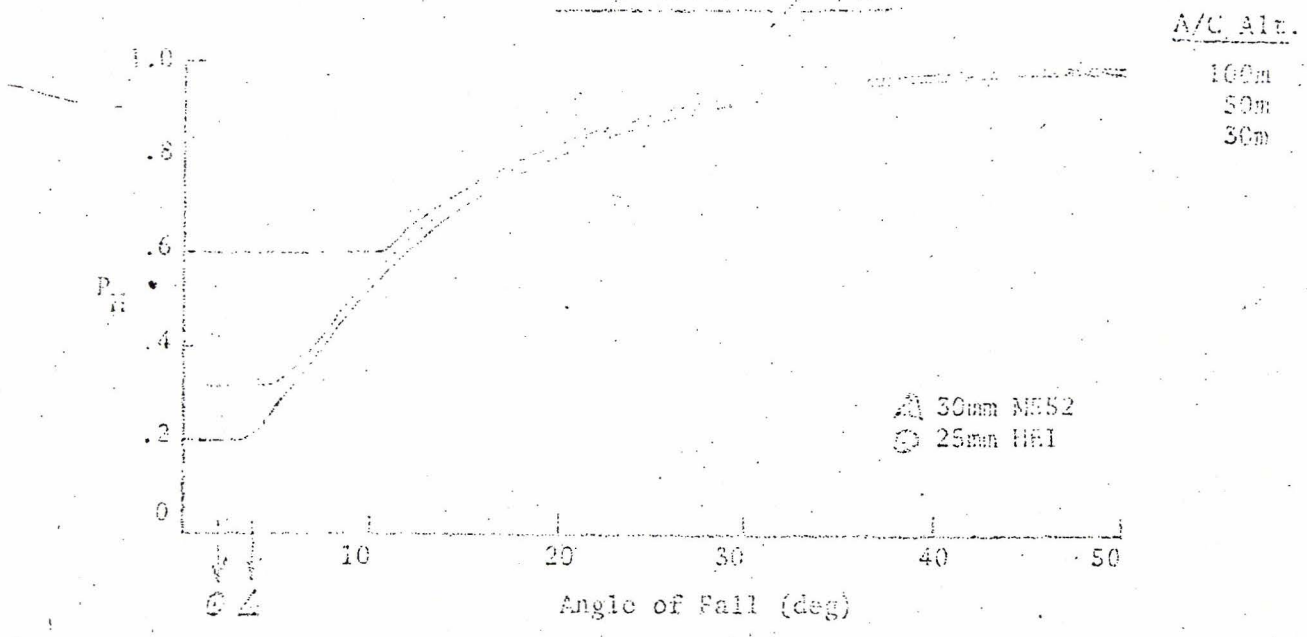


Figure 3 (U) Single Round Probabilities of Hit (P_H) Vs. Angle of Fall (U)



Range = 1000m
Target = 50m x 50m
System Error = 6% (σ)

Range Error = 5% (σ)

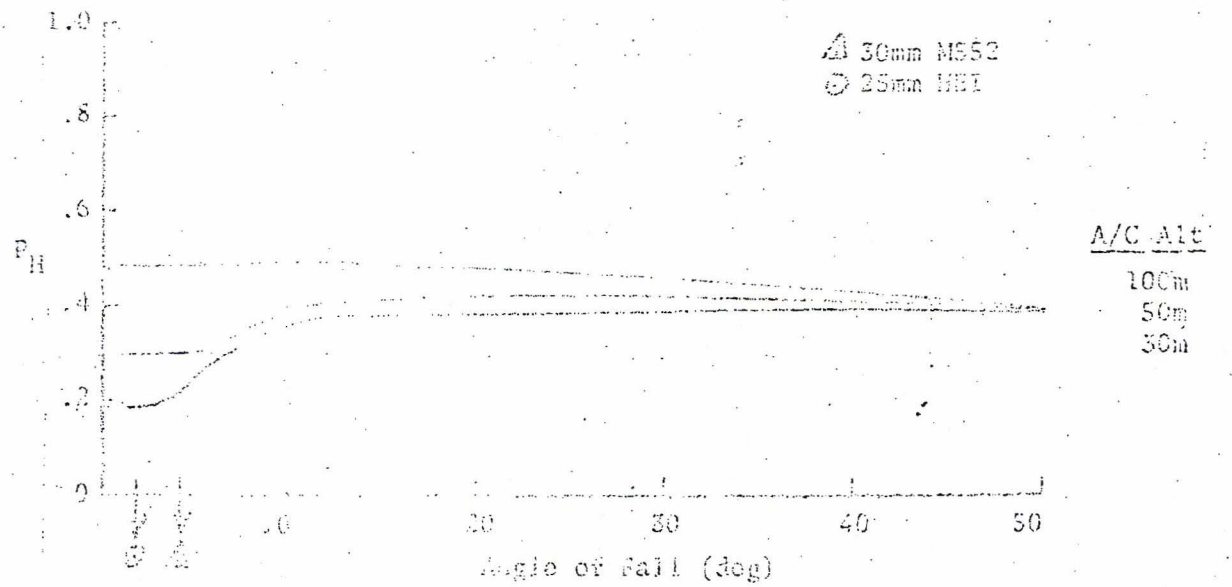
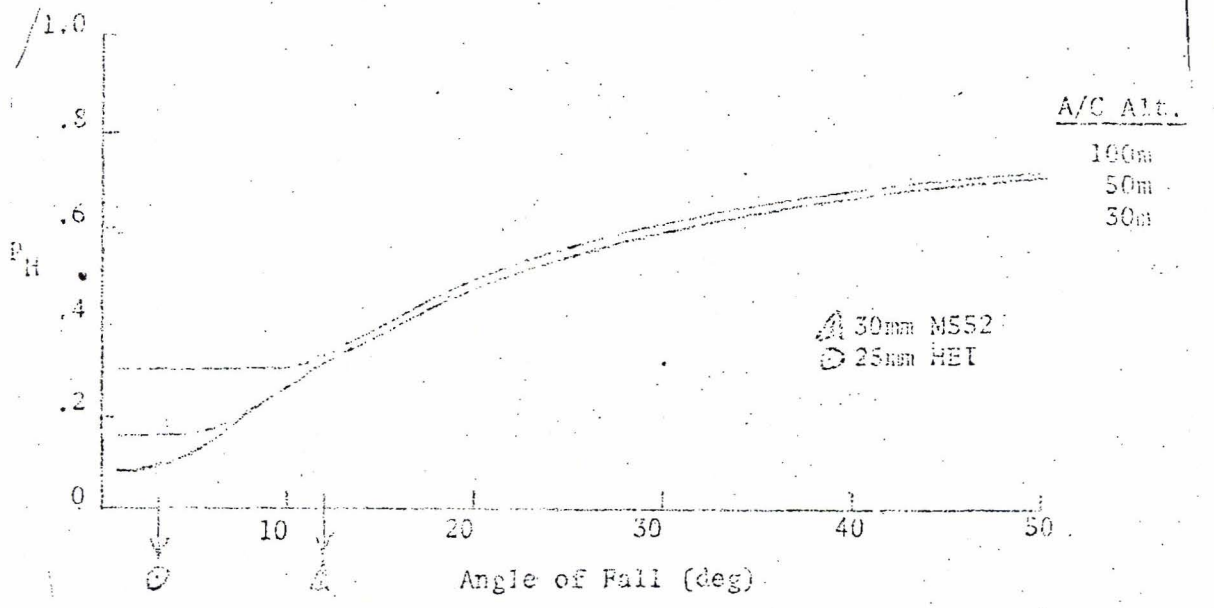


Figure [illegible] Probability of Hit (P_H) Vs. Angle of Fall (θ)

Range Error = 1% (σ)



Range = 2000m
Target = 50m x 50m
System Error = 6μ (σ)

Range Error = 5% (σ)

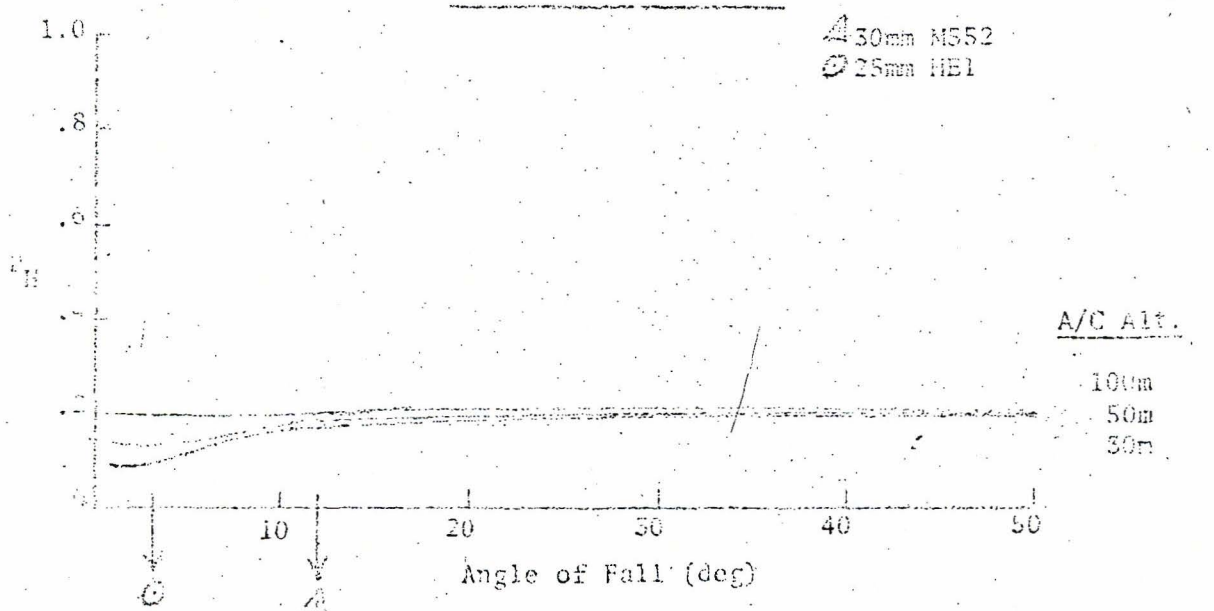


Figure 5 (4) Single Round Probability of Hit (P_H) Vs. Angle of Fall (D

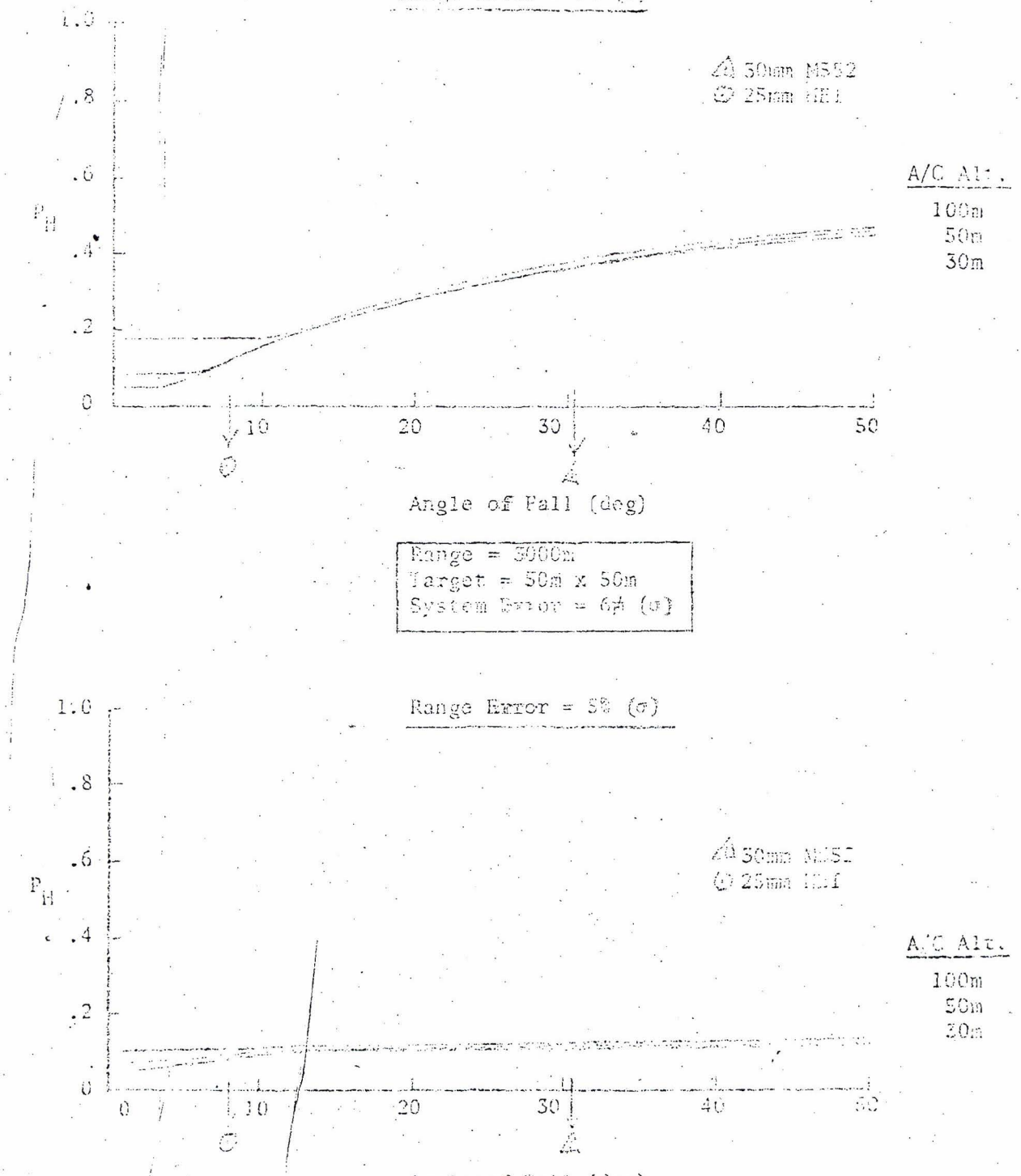


Figure 6 (b) Single Round Probability of Hit (P_H) Vs. Angle of Fall (b)

A_v's and r's are same for both rounds

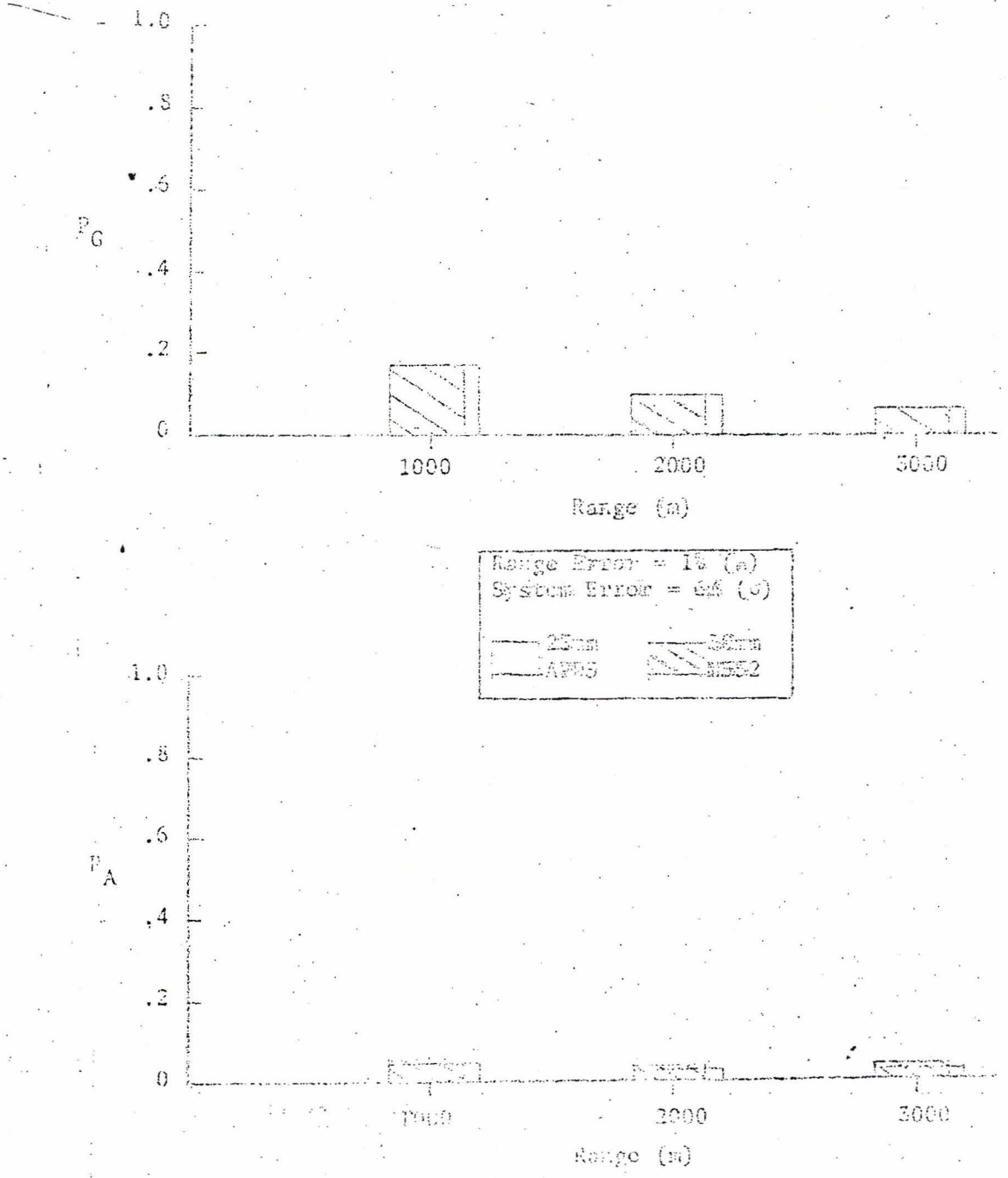
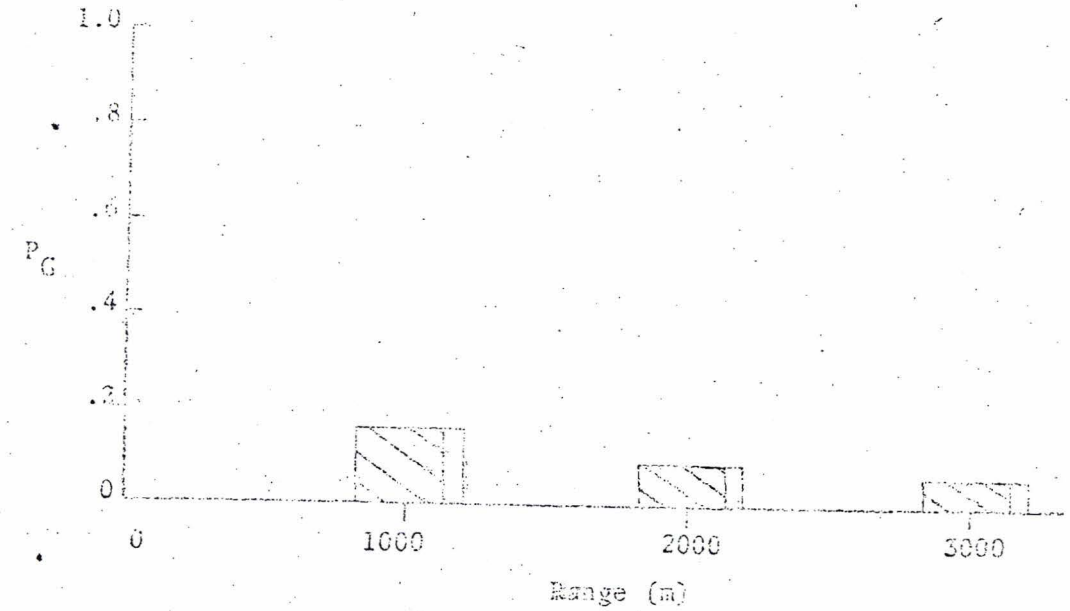
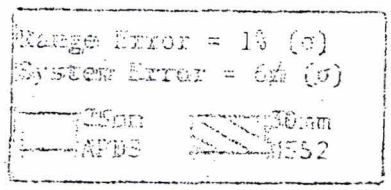


Figure 7 (U) [illegible] Vs. 25-4 (OPT/ROR); 4-Second [illegible] Maneuver (U)

[redacted]

A_v's and w's are same for both rounds





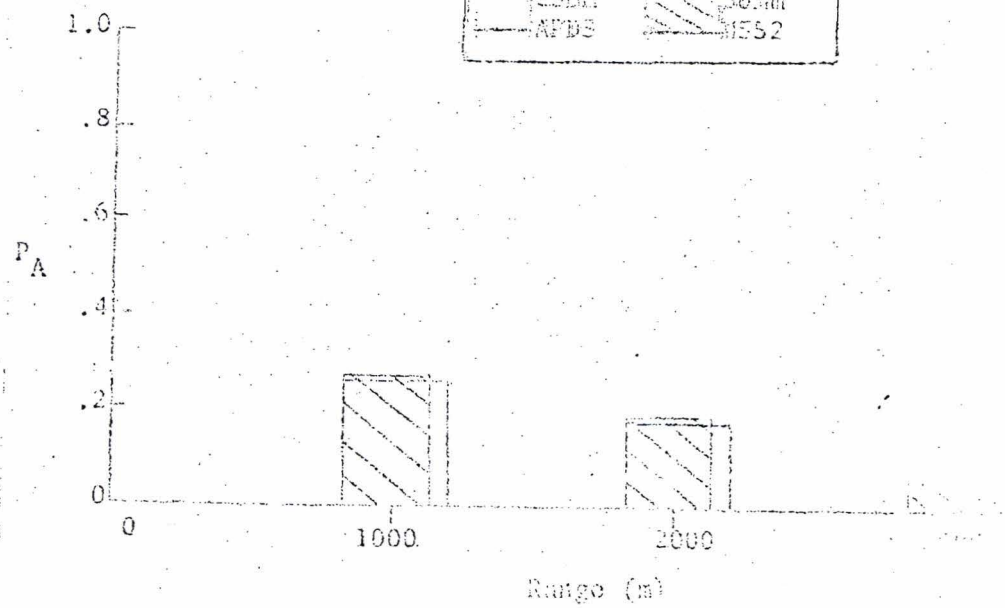
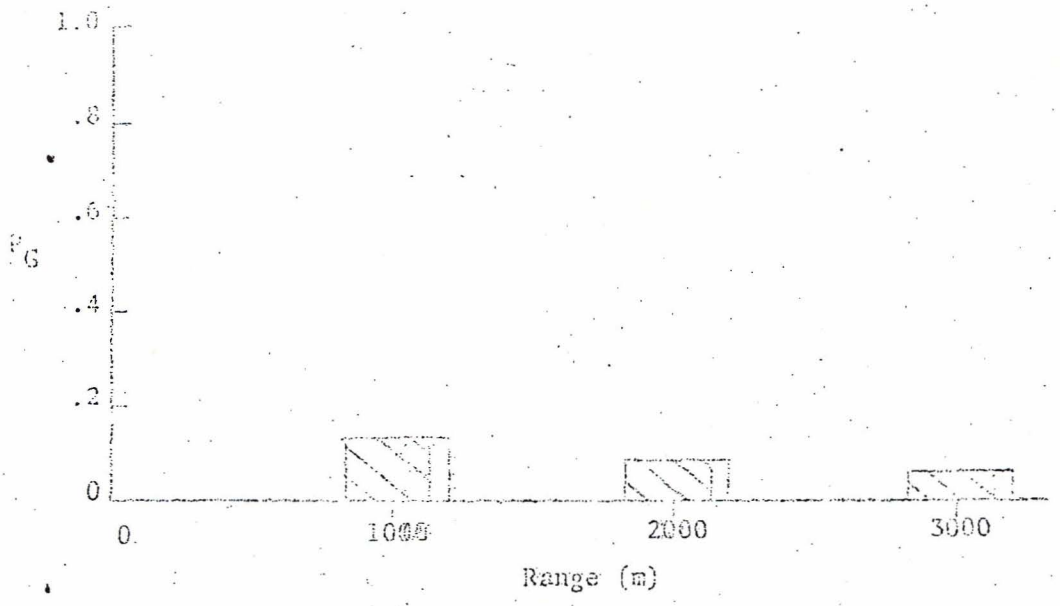


Figure 8 ~~(C)~~ Attack Helicopter Vs. ZSU-23-4 (OPT/IRM)
Detection; g-push Maneuver (U)

[redacted]

A_V's and ω's are same for both rounds



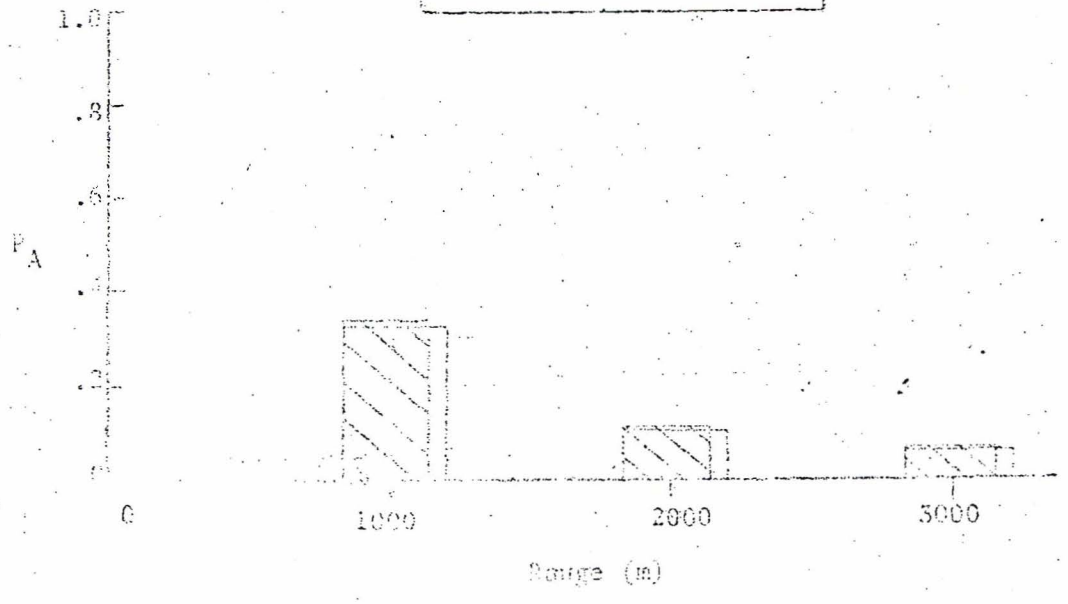


Figure [illegible] Helicopter Vs. ZSU-23-4 (OPT/ROE); 4-second [illegible] Detection Advantage; g-path Maneuver (U)

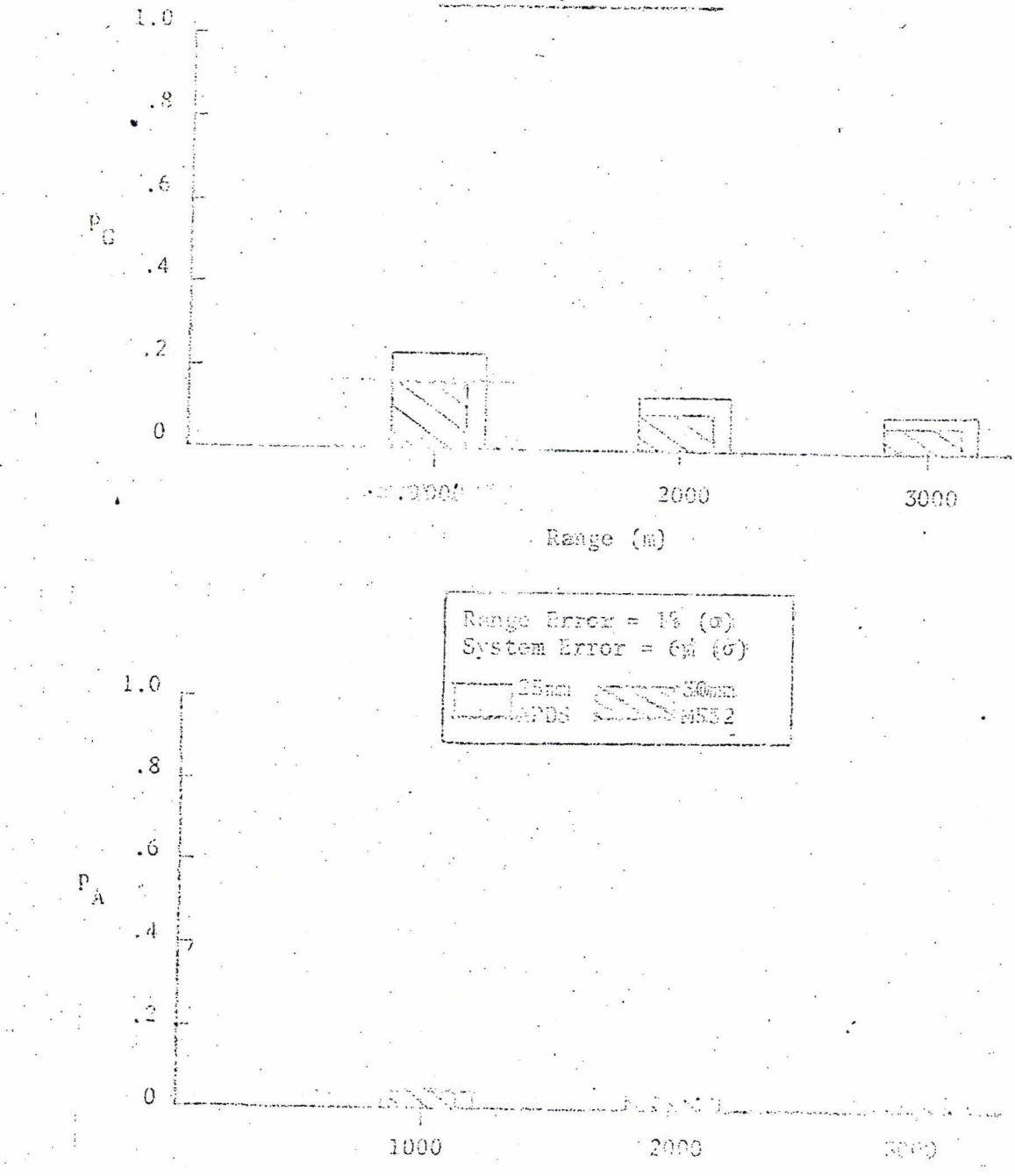


Figure 10 (U) Attack Helicopter Vs. [illegible] Aircraft Detection Adv. [illegible]

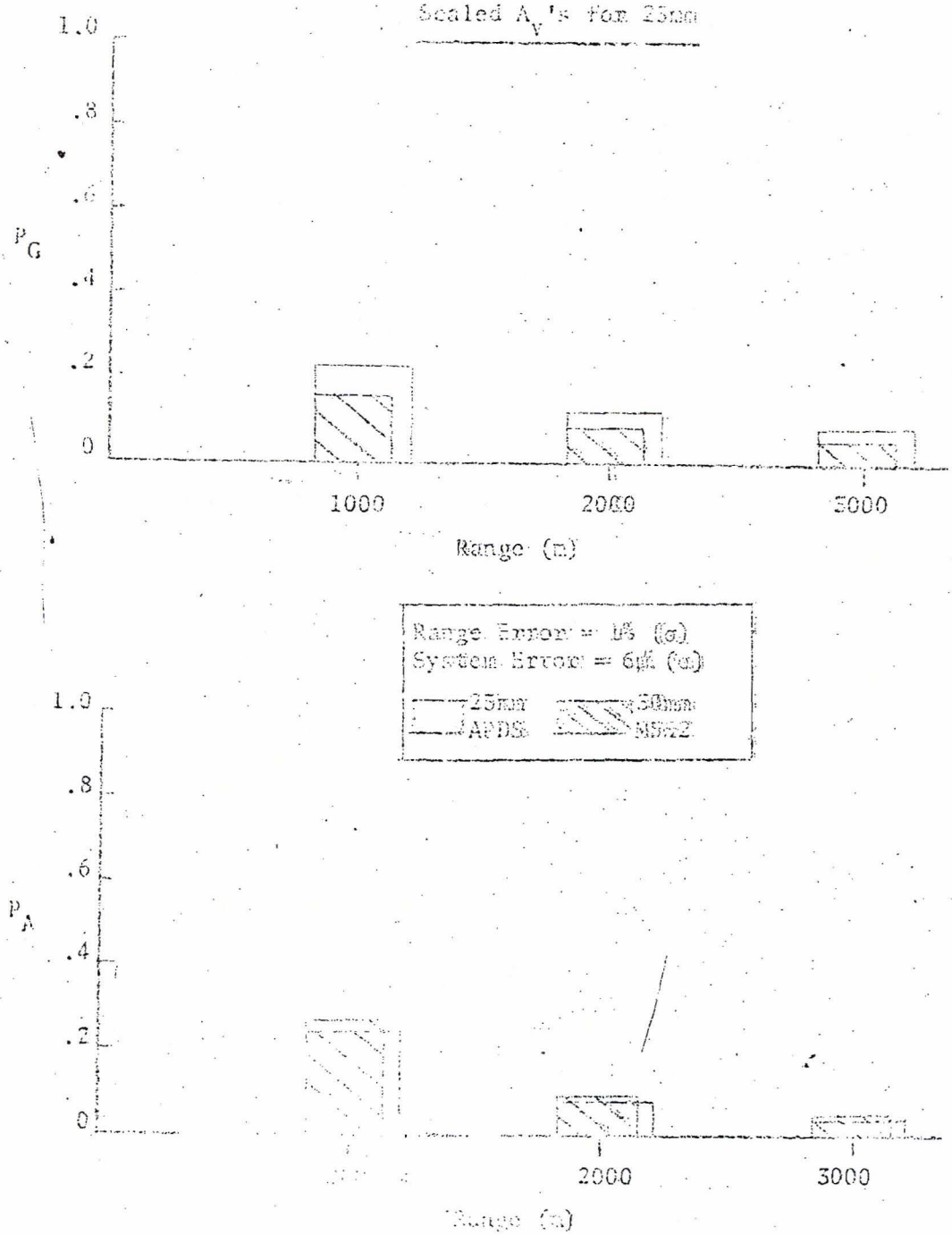


Figure [illegible] Weapon Lt., EMU-25-4 (ONE/NOR) Simultaneous Detections; g-Path Maneuver (U)

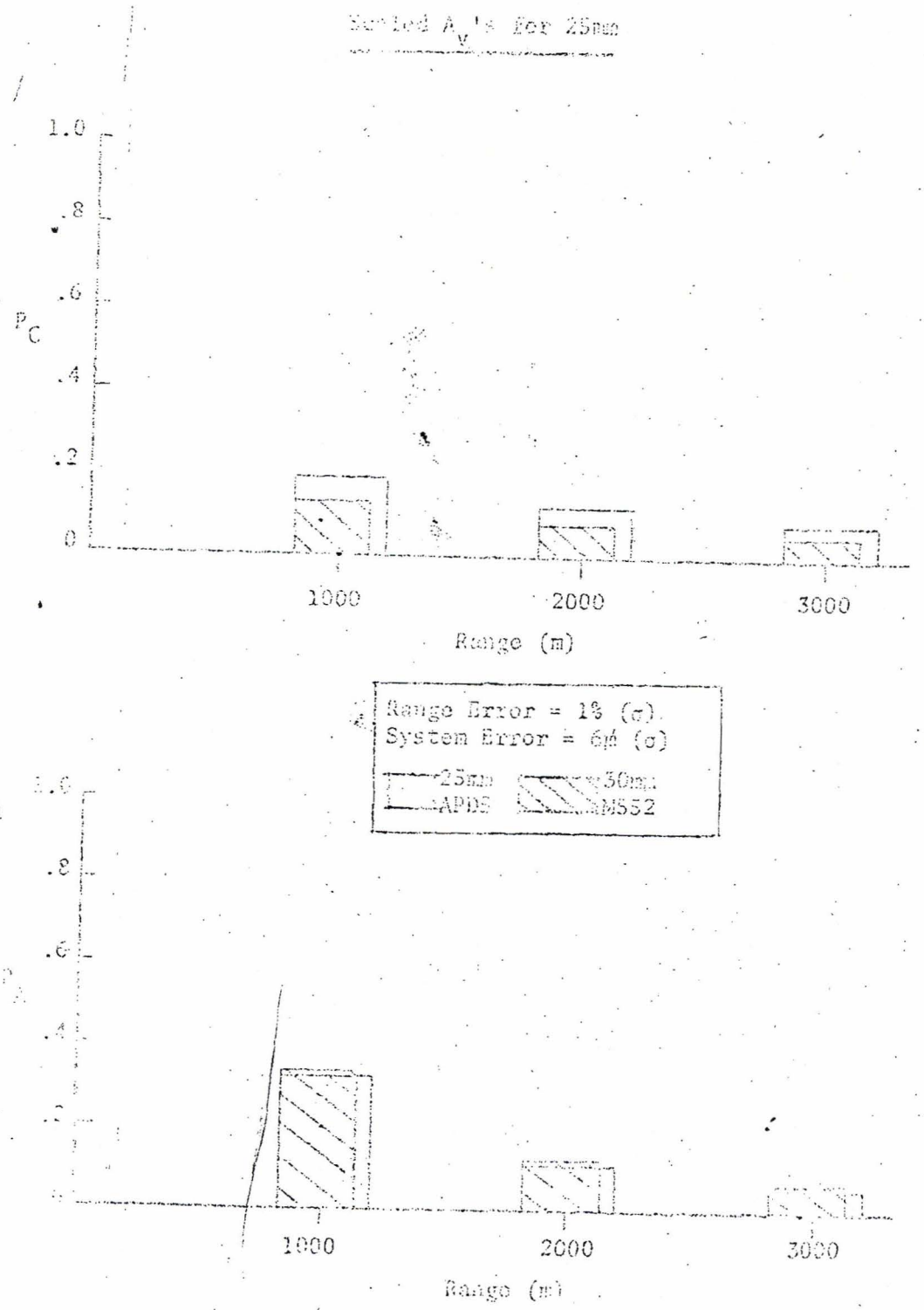


Fig. 10 (U) Attack Helicopter Vs. ZSU-23-4 (OPT/EOR); 4-second ZSU-23-4 Detection Advantage; g-Path Maneuver (U)